



Kongeriget Danmark

Patent application No.: PA 2003 01760
Date of filing: 28 November 2003
Applicant:
(Name and address) Coloplast A/S
Holtedam 1
DK-3050 Humlebæk
Denmark

REC'D 03 JAN 2005	
WIPO	PCT

Title: En bandage

IPC: A 61 F 13/02; A 61 F 15/00

This is to certify that the attached documents are exact copies of the above mentioned patent application as originally filed.



Patent- og Varemærkestyrelsen
Økonomi- og Erhvervsministeriet

17 December 2004

Susanne Morsing
Susanne Morsing

PRIORITY DOCUMENT
SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH
RULE 17.1(a) OR (b)

15690DK00

1

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

A DRESSING PRODUCT**Technical field**

The present invention generally relates to dressings for application to e.g. a skin portion of a human. More specifically, the invention concerns protective sheets for such dressings.

5 Background of the invention

Various dressings, such as wound dressings and surgical drapes and delivery systems therefor, are known. The dressings can be applied to an application site, such as a skin portion of a living being, by removing a releasable protective liner from the adhesive coating and adhering the dressing to the application site. The adhesive is usually coated onto a
10 surface of a polymeric film.

Prior art document EP 308 122 A2 discloses an adhesive coated thin film dressing in combination with an applicator therefor, wherein the applicator comprises a pair of superposed laminar members hinged at one end, the lower member being adapted to be grasped at the end remote from the hinge and the upper member being adapted to support
15 the dressing. The upper member is in releasable contact with a major portion of the adhesive surface therefor. A protector is provided which is in releasable contact with the remaining portion of the adhesive surface and which extends beyond the hinged end of the upper member.

WO 00/41670 discloses a Herpes Labialis plaster formed of a so-called sticking part, a sterile
20 cloth of gauze and an elastic part which is said to be twisted about 90 degrees from its middle along its width.

Further delivery systems and protective liners for dressings are known from US 6,169,224 B1, US 6,264,976 B1 and US 5,738,642.

· Summary of the invention

25 It has been found that application of a substance, such as pharmaceutical product, e.g. in the form of an ointment or cream, or any other substance, such as a moistening cream, a gel or a liquid in the form of a spray, to an anatomical surface, such as a skin portion of a human being, jeopardizes the adhering effects of a dressing subsequently applied to that surface.

15690DK00

2

Therefore, the present inventors have proposed to apply the substance to a surface of a dressing which in turn is applied to the application site. This new insight has resulted in a surprising and significant improvement. However, even this improved solution may have negative effects on the adhering properties of the dressing. Thus, a dressing may separate
5 from an application site, such as a skin portion of a human being, relatively soon after its application, which is not only inconvenient to the patient wearing the dressing but which also increases costs.

It has further been found that the durability of a dressing product which contains or is coated with a substance, such as a pharmaceutical substance, e.g. in the form of an ointment,
10 cream, gel, liquid spray or the like, may have a very limited durability. This is particularly the case if the substance has a relatively short disintegration time, i.e. an integration time which is shorter than the durability of other parts or portions of the dressing product. Thus, the durability of the entire dressing product is negatively affected by the limited durability of the substance contained in or coated onto the dressing.

15 Therefore, it is an object of preferred embodiments of the present invention to provide a dressing product, the durability of which is longer than the durability of at least some of the substances applicable to a surface thereof. It is a further object of preferred embodiments of the present invention to provide a dressing product which eliminates or at least reduces the aforementioned negative effects on adhesive abilities.

20 Accordingly, the invention provides a dressing product comprising:
- a dressing patch, one first surface of which is at least partially provided with an adhesive, whereby said first surface defines an adhering surface for attaching the dressing patch to an anatomical surface of a living being;
- at least one protective sheet adhering to the adhering surface of the dressing
25 patch,
wherein the at least one protective sheet defines at least one opening, through which a portion of the first surface of the dressing patch is accessible while the at least one protective sheet is connected to the dressing.

It will be appreciated that a substance, such as a pharmaceutical substance, which may be in
30 the form of an ointment or cream, gel, liquid spray or the like may thus be applied to a confined area of the adhering surface prior to application of the dressing patch to the application site, i.e. to that area which is accessible through the at least one opening provided in or by the one or more protective sheets. This has, surprisingly, shown to efficiently solve the problem of reduced adhering properties when a substance is applied to
35 the adhering surface, as it may be ensured that substance is not applied to the entire

15690DK00

3

adhering surface. For example, the protective sheet, or a plurality of protective sheets, may cover at least parts of the peripheral portions of the surface of the dressing, so as to ensure that no substance is applied to those parts of the peripheral portions, which in turn are ensured to provide a firm adhering effect along at least a portion of the periphery of the dressing patch. In other words, the opening may be provided in the protective sheet such that it does not extend to the bounds of the dressing patch, whereby application of the pharmaceutical product to a peripheral portion of the adhering surface of the dressing patch may be efficiently prevented. In some embodiments, the at least one opening may be provided centrally within the or each protective sheet. The opening may be provided as a cut-out section in one or more protective sheets attached to the adhering surface, or it may be provided between boundary edges of separate protective sheets.

The provision of the opening in the protective sheet or sheets (or between protective sheets) is further advantageous, as it allows for separate storage of a substance, such as a pharmaceutical substance, to be applied to the surface of the dressing patch. This is in particular beneficial if the substance has a relatively short disintegration time, i.e. an integration time which is shorter than the durability of other parts or portions of the dressing product. Such a substance can advantageously be provided in a separate container, such as a tube, in which it does not disintegrate as fast as when contained in the dressing patch. Thanks to the opening in the protective sheet, the substance to be applied to the dressing product may be easily, but yet accurately, applied by an operator which in many instances is the patient himself/herself. The protective sheet may, in certain embodiments, adhere directly to the adhering surface of the dressing patch, whereas in other embodiments it may be otherwise connected thereto.

In the present context, the term dressing patch should be interpreted in a broad sense, i.e. to include any kind of dressings, including film dressings, such as thin film dressings, dressings with absorbents, blister healing dressings, callus relief dressings, bunion relief dressings, dressings for cuts or grazes, surgical drapes etc.

The at least one opening may be covered by a closing member which is separately releasable from the dressing patch in such a way that the at least one protective sheet remains attached to the dressing patch when the closing member is removed. Thereby, protection of that or those portions the dressing surface which are accessible through the at least one opening may be achieved until immediately before a substance is to be applied through the opening(s). Alternatively, or in addition, the protective sheet may define a folding line and two sections on either side of the folding line, with the first section adhering to the dressing, and the second section overlapping the first section. Accordingly, the second section may serve as a further protective sheet. For example, the cut-out section may be

15690DK00

4

provided in the first section of the protective sheet, whereby the second section may protect that portion of the dressing surface which is accessible through the cut-out section. The folding line may define a hinge around which the second section may be flipped to lay open the opening for application of a pharmaceutical product to the dressing surface through the opening.

The amount of substance ultimately applied to the dressing patch and hence to the application site may be dependent from the thickness of the protective sheet and from the area of the opening (or the accumulated areas of a plurality of openings). Accordingly, the dressing product of the invention may be manufactured with various protective sheet thicknesses, so that the product can be tailored to a specific use, e.g. to a specific dosage of a specific medicament. The dressing product of the invention may also be provided in a kit with a plurality of such dressing products, the respective protective sheets of which have different thicknesses or opening areas, so that a patient may dose a substance, for example a medicament, by selecting a specific dressing product with a certain protective sheet thickness or opening area providing the desired dosage of the medicament.

An alternative way of controlling the amount of substance applied to the surface of the dressing is to provide one or more cavities in the dressing itself for accommodating the substance. The cavity or cavities may be in the form of a dome shaped portion or an indentation.

There may be provided only one or a plurality of openings, such as 2, 3, 4, 5-10, 11-15, 15-20 or more. The openings may be equidistantly arranged across a confined surface area of the at least one protective sheet, e.g. in an array pattern. In some embodiments, the plurality of openings are arranged in a circular fashion.

The at least one protective sheet may be comprised in a carrier system which comprises a gripping section which can be handled by human fingers and a dressing patch supporting section for applying the dressing patch to an application site. Examples of such carrier systems will be given below in connection with the description of the drawings.

The principle of the present invention works equally well in respect of relatively large dressings, i.e. wherein the surface area of the dressing patch is e.g. 5-20 cm² or more, or 10-20 cm², as in respect of relatively small dressings, i.e. wherein the surface area of the dressing patch is less than 5 cm², such as more than 2 cm² and less than 5 cm², such as 1-2 cm², such as 0.1 - 1 cm², such as less than 0.1 cm².

15690DK00

5

Though the term adhesive is used herein it is understood that the term may cover any substance having adherent properties, such as adhesives, silicone or rubbery substances, petrolatum or the like, and hydrocolloid adhesives. The adhesive may be a pressure sensitive adhesive of any suitable kind known *per se*.

- 5 In some embodiments, in particular in those wherein the dressing patch constitutes a so-called thin film dressing, the adhering surface may essentially constitute the first surface of the dressing patch.

- In case of a thin film dressing, the thickness of the adhesive may be in the range of 20-300 μm , such as 30-200 μm , such as 25-150 μm , such as 30-100 μm , and the vapour permeability of the dressing patch may preferably be 200-2000 g/m^2 , such as 200-1000 g/m^2 , such as 300-800 g/m^2 , such as 400-700 g/m^2 , such as 450-650 g/m^2 . It has been found that a dressing patch with such thickness and vapour permeability provides a non-occlusive adhesive dressing patch, i.e. one that enables moisture on, e.g., a skin surface to evaporate through the dressing patch, so as to prevent undesired accumulation of moisture which could cause the dressing patch to lose its adhering contact to the skin or promote bacterial growth between the sheet and the skin. Moreover, the small thickness of the dressing patch results in a discrete appearance once applied to the application site.

- The outer periphery of the dressing patch may be bevelled in order to facilitate separation of the protective sheet from the dressing patch and in order to reduce the risk of rolling-up the dressing which would reduce wear-time. The edge is e.g. bevelled so that the thickness adjacent to the edge does not exceed about 30% of the maximum thickness of the dressing, more preferably not exceeding 25% of the maximum thickness for dressing having a maximum thickness above about 0.7 mm, whereas the thickness adjacent to the edge for dressings having maximum thickness below approximately 0.5 mm preferably does not exceed about 50% of the maximum thickness of the dressing patch.

In order to result in a discrete appearance of a dressing product, for instance a thin film dressing, when applied, e.g., to a face portion of a patient, the dressing patch may be transparent.

- The dressing patch may be provided in the form of a polyurethane film constituting a backing layer with an adhesive applied to at least a portion of one surface thereof. The backing layer may alternatively be of a non-woven material, a foam, PE or PVC. The surface of the dressing patch may comprise a pharmaceutically active substance. For example, emollients or e.g. retinoids for treating or preventing formation of psoriasis, eczema, callous, skin, corns or blisters. Examples of applicable pharmaceutical medicaments include a cytochrome, such as a

15690DK00

6

growth hormone or a polypeptide growth factor such as TGF β , FGF, PDGF, EGF, IGF-1, IGF-2, colony stimulating factor, transforming growth factor, nerve stimulating growth factor and the like giving rise to the incorporation of such active substances in a form being apt to local application in a wound in which the medicament may exercise its effect on the wound, other

5 medicaments such as bacteriostatic or bactericidal compounds, e.g. iodine, iodopovidone complexes, chloramine, chlorhexidine, silver salts such as sulphadizine, silver nitrate, silver acetate, silver lactate, silver sulphate, silver sodium thiosulphate or silver chloride, zinc or salts thereof metronidazol, sulpha drugs, and penicillins, tissue-healing enhancing agents, e.g. RGD tripeptides and the like, proteins, amino acids such as taurine, vitamins such as

10 ascorbic acid, enzymes for cleansing of wounds, e.g. pepsin, trypsin and the like, proteinase inhibitors for use in e.g. surgical insertion of the dressing in cancer tissue and/or other therapeutic agents which optionally be used for topical application, pain relieving agents such as lidocaine or chinchocaine, emollients, retinoids or agents having a cooling effect.

Substances may be applied for the treatment of herpes, acne and warts with medicaments

15 known *per se* for such purposes being contained in the adhesive or being applied thereto. Suitable anti viral medicaments for the treatment of herpes may for example comprise aciclovir or penciclovir. Azelaic acid or isotretinoin may be used in a medicament for the treatment of acne. In respect of the treatment of warts, a mitotic inhibitor, such as podophyllotoxin, is applicable. Warts and/or clavus may be treated by salicylic acid-based

20 medicaments.

The above mentioned pharmaceutically active substances may be applied to the adhering surface of the dressing patch after completion of the adhering coating, or they may be mixed into the adhesive prior to coating thereof onto the backing layer, or they may otherwise be provided onto the surface of the dressing patch.

25 In any of the embodiments disclosed herein, the foil may, e.g., be made from a polyester, such as from PETP, or from paper or cardboard material, preferably coated with e.g. silicone, metal, such as aluminium, or TeflonTM.

From the above discussion it will be appreciated that the invention also provides a method for preparing a dressing patch of a dressing product as disclosed herein, the method comprising:

30 - applying a substance, such as a pharmaceutical substance as described above, to a confined surface portion of said first surface of the dressing patch through the at least one opening; and subsequently;

- separating the at least one protective sheet from the patch.

15690DK00

7

The invention further provides a method of treating a dermal or mucosal affection, comprising the steps of preparing a dressing patch of a dressing product as disclosed herein, the method of preparing comprising:

- applying a pharmaceutical substance to a confined surface portion of said first surface of the dressing patch through the at least one opening; and subsequently:
 - separating the at least one protective sheet from the patch,
- the method of treating comprising applying the dressing patch to an anatomical surface of a living being.

- 10 In a final aspect, the invention provides a kit comprising a dressing product as disclosed herein and a container containing a substance applicable to a surface portion of the first surface of the dressing patch. The substance may comprise an ointment or cream, gel, liquid, e.g. a liquid spray, the substance optionally containing a pharmaceutically active substance, such as any of the substances and medicaments mentioned above.

Description of the drawings

- 15 The invention will now be further described with reference to the drawings in which Figs. 1-28 illustrate various embodiments of dressing products according to the invention.

- 20 It will be appreciated that the thicknesses of the various patches, sheets, foils etc. of the carrier systems illustrated in the drawings are, for the purpose of clear illustration, drawn excessively large relative to the breadths and widths of such sheets, foils etc. In the shown embodiments, each dressing patch 102 may have a total thickness some 50-350 μm or up to 1000 μm , whereas each of the carrier systems illustrated may have a width or breadth of typically 1-10 cm, preferably 1.5-6 cm.

- 25 It will also be appreciated that the scope of the invention is not limited to film dressings with carrier systems therefor, though the drawings merely illustrate various film dressings with carrier systems. As already mentioned above, the invention is generally applicable to any kind of dressing.

- 30 Figs. 1 and 2 show a cross-sectional view and a top view, respectively, of a first embodiment of a dressing product 100. The dressing product comprises a dressing patch 102 consisting essentially of a backing layer 104 made from e.g. polyurethane and coated with an adhesive 106, an adhering surface for attaching the dressing patch to e.g. a skin portion of a patient being thereby defined by the upper surface of the adhesive 106. A carrier system is provided for supporting the dressing patch 102 and for facilitating application thereof. The carrier system comprises a supporting sheet 108 made from a coated paper or cardboard material,

15690DK00

8

and a protective sheet in the form of a foil member 110. A further adhesive (not shown) is provided for securing the supporting sheet 108 in relation to the backing layer 104. The supporting sheet 108 defines gripping sections 109 at the regions of non-overlap with the dressing patch 102. The foil member 110 defines first and second sections 112 and 114, respectively, and a folding line or hinge 116. A cut-out section 113 is provided in the first section 112 of the foil member 110, so that a substance may be applied to the adhering surface when the second section 114 is flipped away from the first section 112 around the hinge 116. The foil member may be peeled off the adhering surface and adhesive 106 by gripping the second section 114 and drawing it to the left in Fig. 1. The properties of the material of the surface of at least the first portion 112 of the foil 110 and the adhesive 106 on the one hand, and the material of the supporting sheet 108, the backing layer 104 and the adhesive (not shown) between the backing layer and the supporting sheet on the other hand are such that the dressing patch 102 firmly sticks to the supporting sheet when the foil member 110 is peeled off the adhesive 106. An operator may then grip either one or both of the gripping sections 109 and apply the dressing patch to an application site with the adhesive 106 facing the application site. Once the adhesive 106 adheres to the application site, the supporting sheet 108 is separated from the backing layer 104, the force being required therefor being smaller than the force required for separating the adhesive 106 from the application site, e.g. a skin portion of a human, so that it is ensured that the dressing patch 102 firmly sticks to the application site when the supporting sheet 108 is removed. The embodiment of Figs. 1 and 2 may be modified by enlarging the gripping sections 109 in order to provide an extended handling area.

Figs. 3 and 4 show a second embodiment of a dressing product 140 which comprises a carrier system 142 with a protective sheet 144 and 146, of which portion 144 constitutes a supporting section which is integral with section 146. Two opposing notches 148 are provided at either side of the carrier system at the transition between the supporting section 144 and section 146. A cut-out section 147, through which a pharmaceutical substance may be provided to the adhesive 106, is provided in the protective sheet 146. Prior to application of the dressing sheet 102, the protective sheet 146 is torn off the supporting section 144 by braking the carrier system 142 between the notches 148, as indicated by dashed line 150 in Fig. 7. A right-hand portion of the adhesive 106 is then attached to the application site, and the supporting section is finally gradually separated from the adhesive 106, as the remaining sections of adhesive gradually attach to the application site. The supporting sheet may e.g. be made from PETP.

A further embodiment of a dressing product 160 is shown in Figs. 5 and 6, in which a protective sheet in the form of a foil member 162 is arranged between supporting sheet 108 and a portion of the adhesive 106. The foil member defines first and second sections 164 and

15690DK00

9

166, respectively, at the transition between which there is defined a hinge or folding line 168. An adhesive (not shown) is optionally provided for adhering a lower surface of the second foil section 166 to an upper surface of the supporting sheet 108. Prior to application of the dressing sheet 102, the supporting sheet 108 is separated from the adhesive 106 and the second foil section 166, which in turn is flipped around hinge or folding line 168, whereby a portion of the adhesive 106 is exposed through cut-out section 165, through which a pharmaceutical substance may be applied. An initial portion of the adhesive 106 (to the right in Fig. 8) is then adhered to the application site, and as the foil member 162 is gradually peeled off the adhesive 106, the remaining portions of the adhesive 106 gradually adhere to the application site.

Figs. 7 and 8 show a further embodiment of a dressing product 170. The carrier system of the dressing product comprises a sheet supporting section 172 defining a U-shaped end portion 174 with legs of the U defining a support for a peripheral section 107 of the adhesive 106. A protective sheet or foil member 176 adheres to a lower portion of the supporting section 172 by means of adhesive 178. Though the protective sheet 176 does not contact the adhesive 106 in Fig. 11, it will be appreciated that, due to the flexibility of the protective sheet 176 and dressing sheet 102, the protective sheet will normally adhere to the adhesive 106, whereby improved protection of the adhesive 106 is achieved. The protective sheet 176 defines a cut-out section 177 through which a pharmaceutical substance may be applied to a central portion of the adhesive 106 prior to application of the dressing sheet. The protective sheet 176 defines first and second sections 173 and 175, respectively overlapping each other and being interconnected at a hinge or folding line 179, whereby lower section 175 protects that part of the adhesive 106 which is exposed through cut-out section 177. An adhesive (not shown) is applied not only in the region in which the protective sheet 176 overlaps the supporting section 172, but also in the region in which the protective sheet 176 overlaps the dressing product 102 and thereby the adhesive 106. It should, however, be understood that the adhesive 178 need not be provided in the region of overlap with the dressing product, as the adhesive 106 thereof may serve to adhere the protective sheet 176 to the dressing product. Prior to application of the dressing sheet 102, the protective sheet 176 is peeled off the dressing product 102 and off the supporting section 172. An operator holding the supporting section 172, which also constitutes a gripping section of the carrier system, then attaches the adhesive 106 to the application site, and once those portions of the adhesive, which do not constitute the peripheral section 107, are attached to the application site, the supporting sheet 172 is peeled off the peripheral section 107 of the adhesive 106 by simultaneously twisting the supporting section 172 away from the application site (upwardly in Fig. 7) and drawing it away from the dressing sheet (to the left in Fig. 7). The supporting section 172 may e.g. be made from a silicone coated cardboard, paper or plastics material, such as PETP.

15690DK00

10

In the embodiment of Figs. 9 and 10 of a dressing product 180, the carrier system comprises a ring-shaped sheet 182 and protective sheet 184 which may adhere to the ring-shaped sheet by an adhesive (not shown). As shown in Fig. 14, the ring-shaped sheet 182 defines a plurality of radially extending slits or notches 183 which are preferably equidistantly arranged along an inner periphery of the sheet 182. However, the slits 183 may alternatively be arranged along the outer periphery of the sheet 182, or slits may be arranged at the inner as well as at the outer periphery. A cut-out section 185 of the protective sheet 184 allows for application of a pharmaceutical substance to the adhesive 106. Prior to application of the dressing product, the protective sheet 184 is separated from the ring-shaped sheet 182. Next, the ring-shaped sheet 182 is broken at one or more of the slits 183, so that an initial portion of a periphery of the adhesive 106 is exposed and ready for application. Once such an initial portion of the periphery of the adhesive 106 adheres to the application site, the remaining portions thereof are gradually attached to the application site as the sheet 182 is gradually peeled of the adhesive 106, whereby the sheet 182 will normally break at several or all of the slits 183. The protective sheet 184 may e.g. be made from a PETP foil, optionally coated with e.g. a silicone material, and for convenient control of release values, the ring-shaped sheet 182 may be silicone coated.

The carrier system of the embodiment of a dressing product 190 shown in Figs. 11 and 12 comprises a supporting section 192 which also defines a gripping section, and a protective sheet 194 which is provided with a cut-out section 193. Preferably, the section 192 and sheet 194 are made from the same sheet material and separated by a cut or punching along line 196. That end portion of section 192 which faces sheet 194 is essentially U-shaped, with the facing end portion of sheet 194 defining a complementary shape. The dressing sheet 102 is arranged at the transition between section 192 and sheet 194 and may serve to secure section 192 in relation to sheet 194. Alternatively or additionally, a separate adhesive-coated sheet (not shown) may be provided for securing section 192 in relation to each other. Prior to application of the dressing sheet 102, the sheet 194 is separated from the dressing sheet 102 by twisting it out of the plane of Fig. 15 and drawing it away from the supporting section 192. The legs of the U-shaped end portion of the supporting section 192 thereby define a support for the peripheral section 107 of the dressing sheet 102. A pharmaceutical product may be applied to the adhering surface of the dressing product 102 which is exposed between the two legs of the U-shaped end portion of the supporting sheet 192. The dressing sheet 102 is applied to the application site by the supporting and gripping section 192 which is peeled off the dressing sheet once the non-supported portion of the dressing sheet adheres to the application site, whereby the peripheral section 107 may finally adhere to the application site. The section 192 and sheet 194 may have different release properties, so that a larger force is required for separating the dressing sheet 102 from the supporting section 192 than the force needed for separating the sheet 194 from the dressing sheet 102, whereby it may be

15690DK00

11

ensured that the dressing product sticks to supporting section 192 (and not to sheet 194) when the section 192 and sheet 194 are separated. This effect may be achieved by different surface materials of the section 192 and of the sheet 194, e.g. by coatings of different silicone materials. The aforementioned effect may alternatively be achieved – or enhanced –
5 by designing the supporting section 192 and the sheet 194 such that a major part of the surface area of the dressing sheet 102 adheres to the sheet 194.

In the embodiment of a dressing product 241 of Figs. 13 and 14, a cut-out section 247 is provided in intermediate layer 245, and a cut-out section 251 is provided in protective sheet 249 for application of a pharmaceutical substance to the adhesive 106. When the dressing
10 sheet 102 with a pharmaceutical product, which may e.g. be in the form of a cream, is pressed against the application site, the dressing product may deflect slightly into the cut-out section 247 of intermediate layer 245, whereby mashing of the cream onto the peripheral section of the adhesive 106 may be prevented or reduced.

Figs. 15 and 16 illustrate an embodiment of a dressing product 260, the carrier system of
15 which comprises a combined supporting, gripping and protective sheet 262 connected to a sheet 264 via hinge member 266. A cut-out section 263 is provided in the protective sheet 262. The adhesive 106 may be released from the protective sheet 262 and flipped over by means of the hinge member 266, whereby the hinge member 266 and the dressing sheet 102 may form an extension of the protective sheet 262 in the cross-sectional view of Fig. 25.
20 When the dressing sheet is applied to the application site, the sheet 264, which may be attached to the backing layer 104 by means of an adhesive (not shown), separates from the backing layer 104. The sheet 264 may be made from a paper or cardboard material, and the protective sheet 262 may e.g. be made from a PETP foil.

In the embodiment of a dressing product 270 of Figs. 17 and 18, the carrier system
25 comprises a protective sheet 272 with a cut-out section 273, a handgrip member 274 and an intermediate paper or cardboard layer 276 attached to the backing layer 104 by an adhesive (not shown). When the protective sheet 272 has been separated from the dressing sheet 102, the latter may be applied to the application site by means of the handgrip member 274, the paper layer 276 separating from the backing layer 104 once the adhesive 106 adheres to
30 the application site and the handgrip member 274 is withdrawn. The protective sheet 272 may e.g. be made from a PETP sheet.

Figs. 19 and 20 show an embodiment similar to the embodiment of Figs. 17 and 18, in which dressing product 275 comprises a protective sheet 277 with a plurality of openings or cut-out sections 279, see Fig. 30 in which five such cut-out sections are depicted.

15690DK00

12

A similar embodiment is shown in Figs. 21 and 22. The carrier system of a dressing product 280 comprises a protective sheet 282 having first and second overlapping sections 288 and 290, respectively, which are interconnected at hinge or folding line 292, a folded gripping section 284 and a paper or cardboard layer 286. A cut-out section 289 is provided in the first sheet section 288 and covered by the second sheet section 290 in the initial condition of the sheet. Once the second section 290 has been flipped over, and the first section has been peeled off the adhesive 106, the gripping sheet 284 is used to apply the dressing sheet 102 to the application site.

A further embodiment of a dressing product 310 is shown in Figs. 23-26, the carrier system of which comprises a protective sheet 312 with a cut-out section 313 and a combined supporting and gripping sheet 314 (Figs. 25 and 26). In the initial configuration of the dressing product (not shown), sheet 314 with ring-shaped member 316 adhere to the upper surface of the dressing sheet 102. Once the protective sheet 312 has been peeled off the adhesive 106, the supporting sheet 314 is used for applying the dressing product to the application site, and once application is effected, the supporting sheet 314 is separated from the backing layer. When the dressing sheet 102 is pressed against the application site by means of sheet 314, the dressing sheet 102 may deflect slightly into cavity 317, so that a gel, ointment, cream or other liquid substance applied to the adhering surface 106 is not mashed across the adhering surface 106.

Figs. 27 and 28 show yet a further embodiment of a dressing product 330, the carrier system of which comprises a protective sheet 332, such as a silicone coated paper sheet, with a cut-out section 333, and a thread 334. The dressing sheet 102 may be separated from the protective sheet 332 by drawing the thread away from the protective sheet 332, and subsequently the thread may be used as an applicator for the dressing sheet 102. Once the adhesive 106 of the dressing sheet 102 adheres to the application site, the thread is withdrawn by cautiously pulling it along the dressing sheet between the adhesive 106 and the application site.

15690DK00

13

CLAIMS

1. A dressing product comprising:
 - a dressing patch, one first surface of which is at least partially provided with an adhesive, whereby said first surface defines an adhering surface for attaching the dressing patch to an anatomical surface of a living being;
 - at least one protective sheet adhering to the adhering surface of the dressing patch, characterised in that the at least one protective sheet defines at least one opening, through which a portion of the first surface of the dressing patch is accessible while the at least one protective sheet is connected to the dressing.
2. A dressing product according to claim 1, wherein the at least one protective sheet comprises two or more sheet parts, and wherein the at least one opening is provided in one or more of the protective sheet parts or between boundaries thereof.
3. A dressing product according to claim 1 or 2, wherein the at least one opening is provided at a location different from a periphery of the dressing pad.
4. A dressing product according to any of the preceding claims, wherein the at least one opening is covered by a closing member which is separately releasable from the dressing patch in such a way that the at least one protective sheet remains attached to the dressing patch when the closing member is removed.
5. A dressing product according to any of the preceding claims, wherein the at least one opening comprises a plurality of openings, such as 2, 3, 4, 5-10, 11-15, 15-20 or more.
6. A dressing product according to claim 5, wherein the openings are equidistantly arranged across a confined surface area of the at least one protective sheet.
7. A dressing product according to any of the preceding claims, wherein the at least one protective sheet is comprised in a carrier system, the carrier system comprising a gripping section which can be handled by human fingers and a dressing patch supporting section for applying the dressing patch to an application site.
8. A dressing product according to any of the preceding claims, wherein the surface area of said first surface of the dressing patch is 10-20 cm², or less than 10 cm², such as more than 5 cm² and less than 10 cm², such as less than 5 cm², such as more than 2 cm² and less than 5 cm², such as 1-2 cm², such as 0.1 - 1 cm², such as less than 0.1 cm².

15690DK00

14

9. A dressing product according to any of the preceding claims, wherein the adhering surface comprises hydrocolloid particles.
10. A dressing product according to any of the preceding claims, wherein the adhering surface essentially constitutes said first surface of the dressing patch.
- 5 11. A dressing product according to any of the preceding claims, wherein the thickness of the adhesive is 20-300 μm and the vapour permeability of the dressing patch is 200-2000 g/m^2 .
12. A dressing product according to any of the preceding claims, wherein the adhesive is applied to a backing layer made from a polyurethane film.
- 10 13. A dressing product according to any of the preceding claims, wherein the adhering surface of the dressing patch comprises a pharmaceutically active substance.
14. A dressing product according to any of the preceding claims, wherein the dressing patch has bevelled edge portions.
15. A method for preparing a dressing patch, a first surface of which is at least partially provided with an adhesive, whereby said first surface defines an adhering surface for attaching the dressing patch to an anatomical surface of a living being, the dressing patch being comprised in a dressing product which further comprises at least one protective sheet adhering to the adhering surface of the dressing patch, the at least one protective sheet defining at least one opening, through which a portion of the first surface of the dressing patch is accessible while the at least one protective sheet is connected to the dressing, the method comprising:
- 20 - applying a substance to a confined surface portion of said first surface of the dressing patch through the at least one opening; and subsequently:
- separating the at least one protective sheet from the patch.
- 25 16. A method of treating a dermal or mucosal affection, comprising the steps of preparing a dressing patch, a first surface of which is at least partially provided with an adhesive, whereby said first surface defines an adhering surface for attaching the dressing patch to an anatomical surface of a living being, the dressing patch being comprised in a dressing product which further comprises at least one protective sheet adhering to the adhering surface of the dressing patch, the at least one protective sheet defining at least one opening,
- 30 through which a portion of the first surface of the dressing patch is accessible while the at least one protective sheet is connected to the dressing, the method of preparing comprising:
- applying a pharmaceutical substance to a confined surface portion of said first

15690DK00

15

surface of the dressing patch through the at least one opening; and subsequently:

- separating the at least one protective sheet from the patch,
the method of treating comprising applying the dressing patch to an anatomical surface of a living being.

5 17. A kit comprising a dressing product according to any of claims 1-13 and a container containing a substance applicable to a surface portion of the first surface of the dressing patch.

18. A kit according to claim 17, wherein the substance comprises an ointment or cream.

15690DK00

16

ABSTRACT

5 A dressing product comprises a dressing patch, one first surface of which is provided with an adhesive, and a protective sheet adhering to the adhering surface of the dressing patch. The protective sheet defines at least one opening, through which a portion of the first surface of the dressing patch is accessible while the at least one protective sheet is connected to the dressing. Thereby, a substance, such as an ointment or cream, gel, liquid, e.g. a liquid spray, which substance optionally contains a pharmaceutically active substance may be accurately but yet easily applied to a confined surface area of the dressing patch.

(Fig. 3)

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

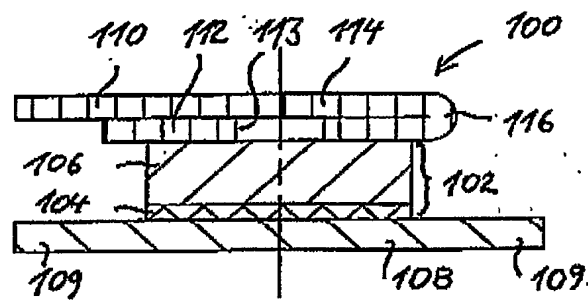


Fig. 1

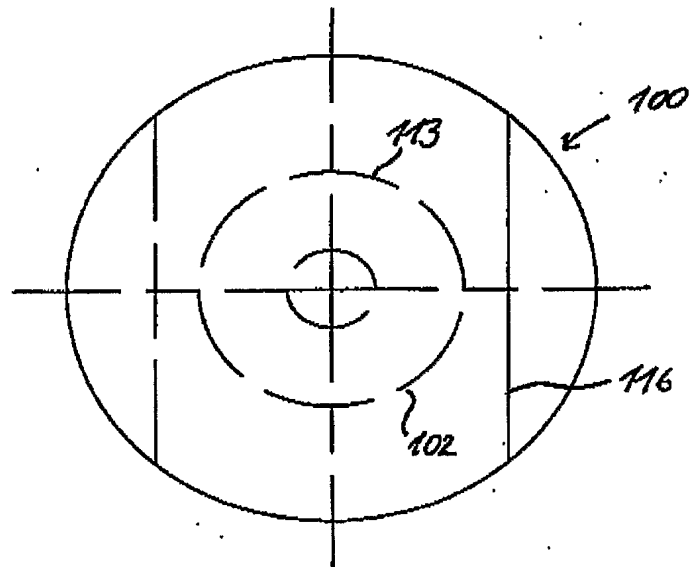


Fig. 2

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

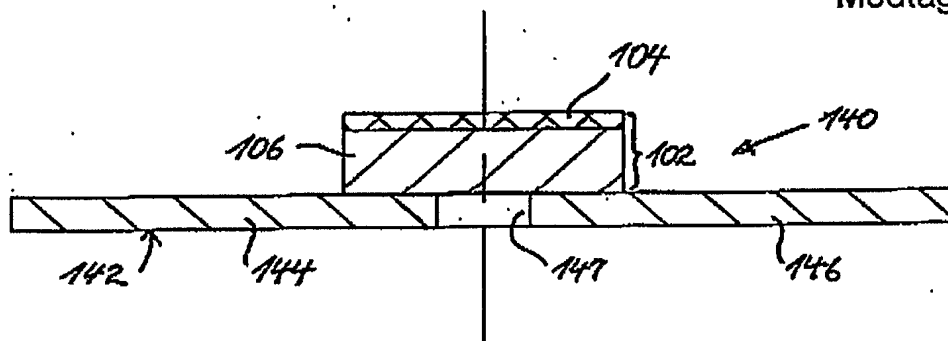


Fig. 3

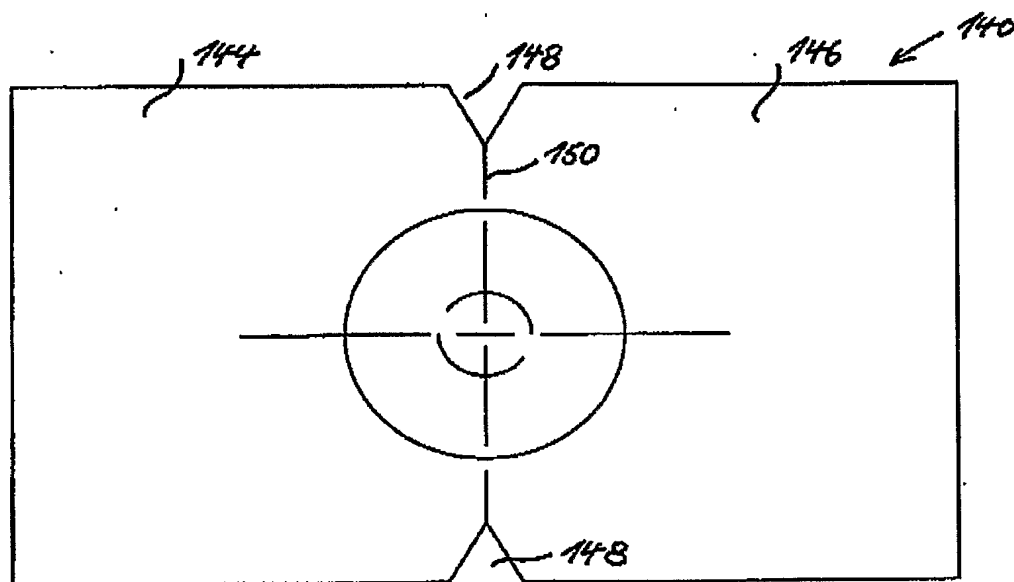


Fig. 4

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

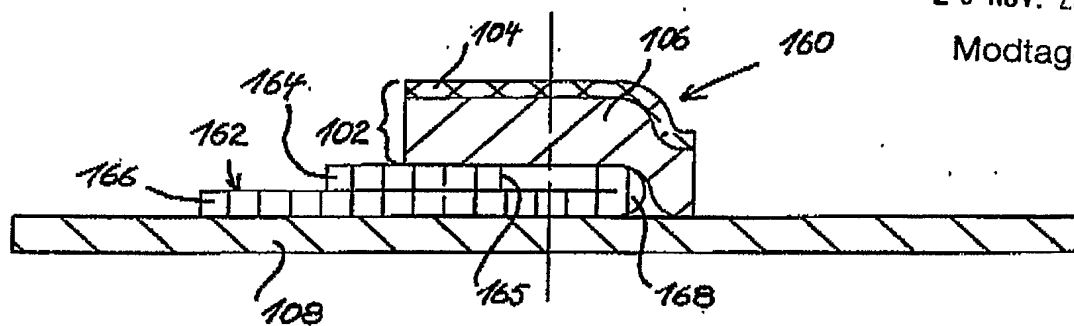


Fig. 5

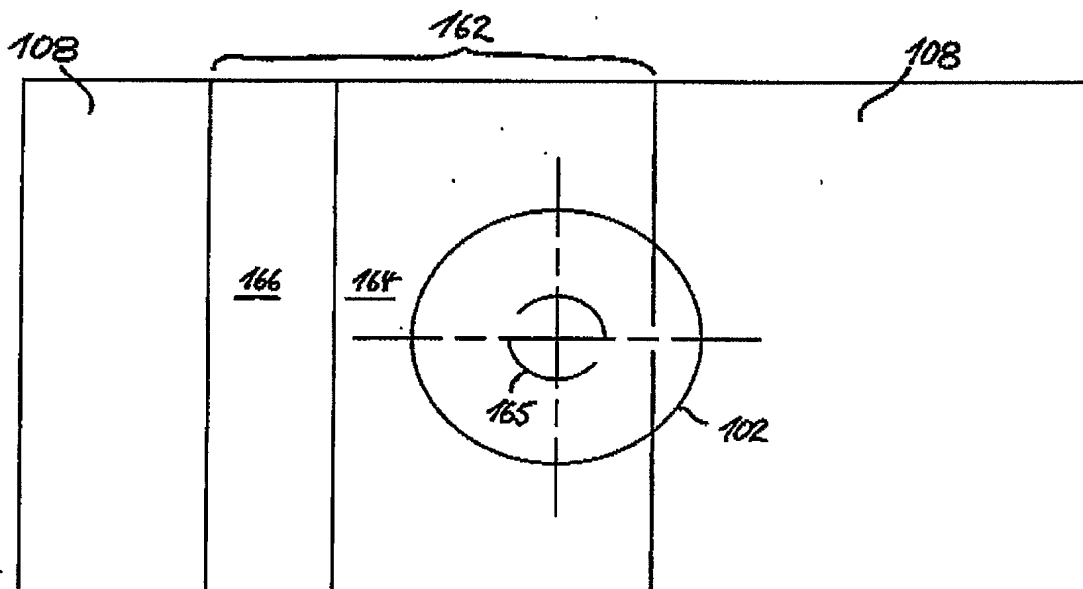


Fig. 6

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

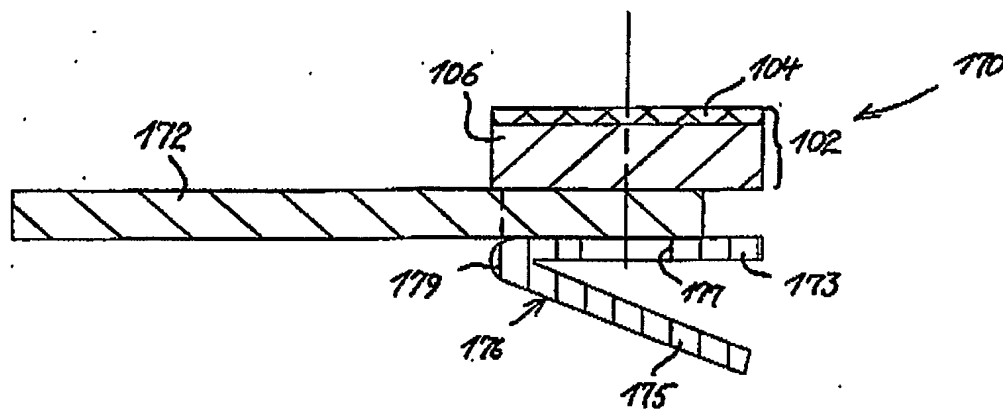


Fig. 7

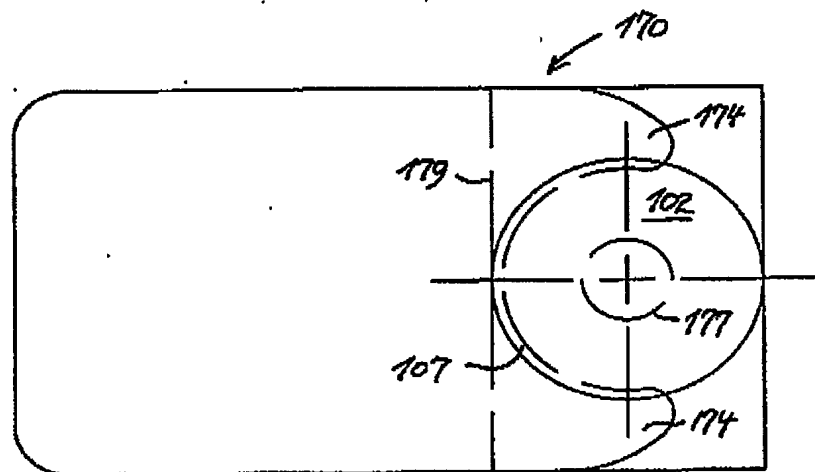


Fig. 8

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

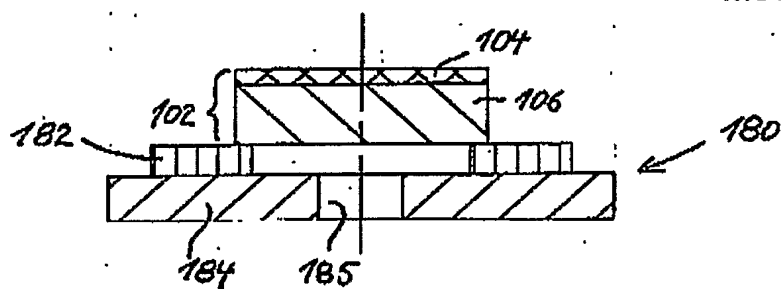


Fig. 9

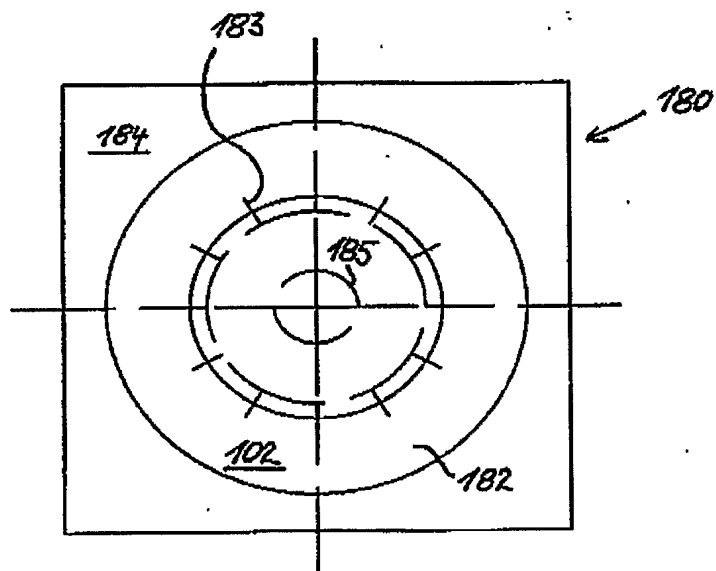
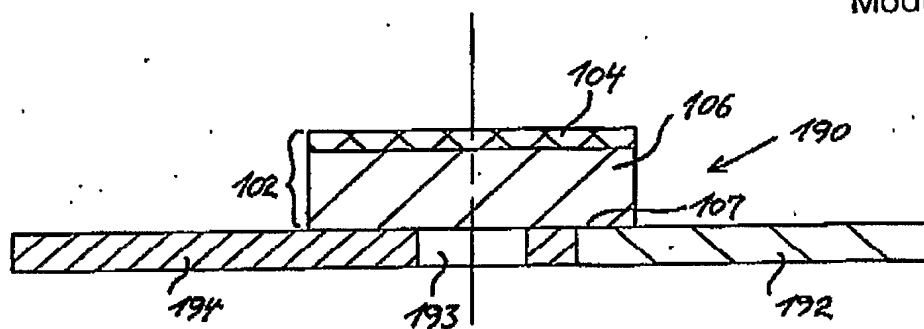
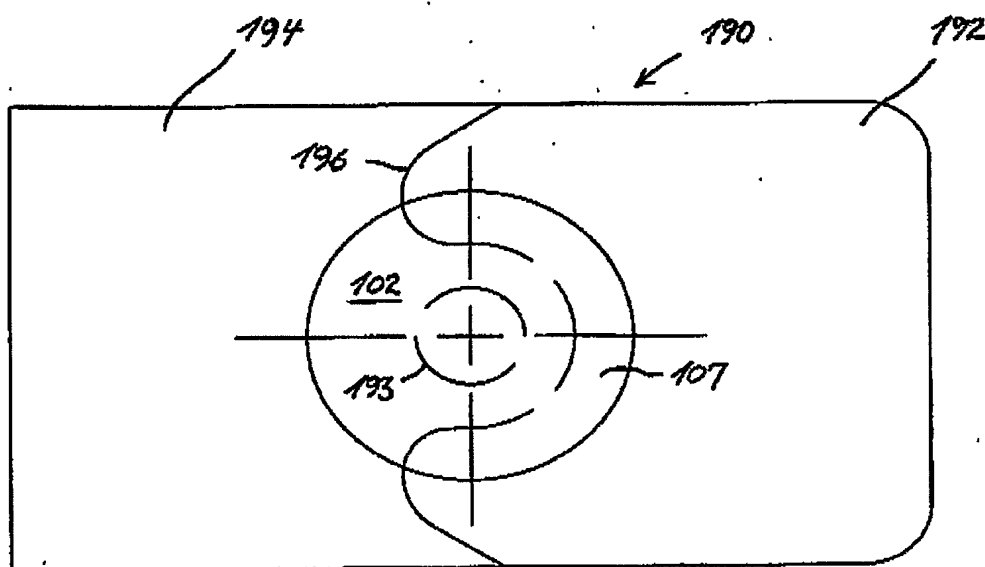


Fig. 10

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

**Fig. 11****Fig. 12**

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

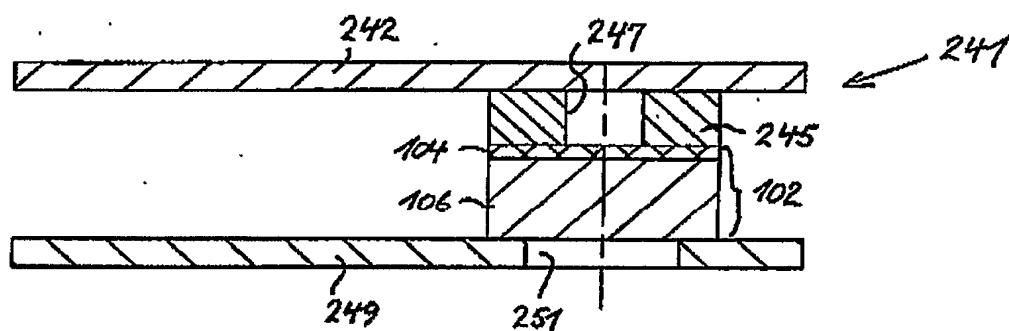


Fig. 13

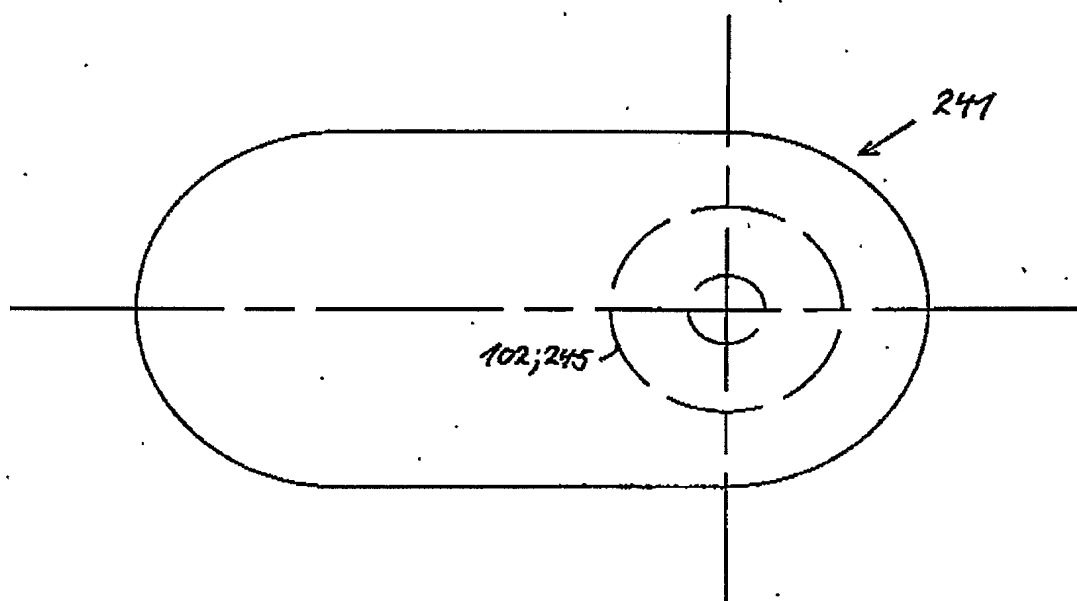


Fig. 14

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

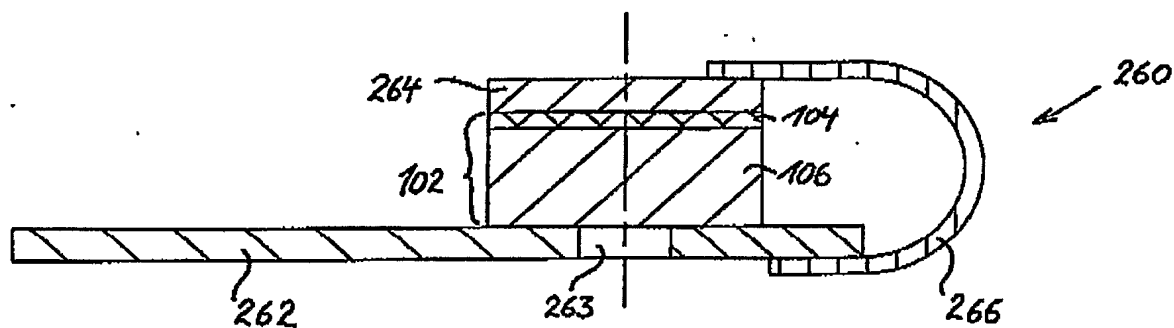


Fig. 15

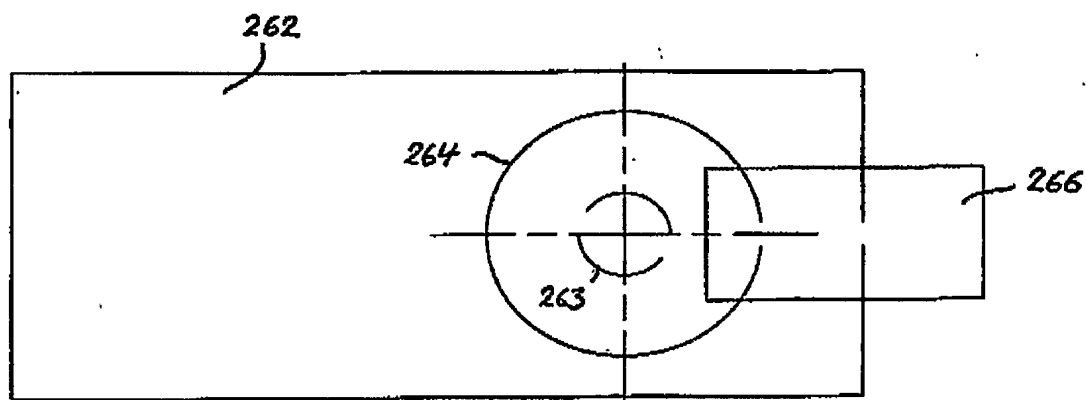


Fig. 16

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

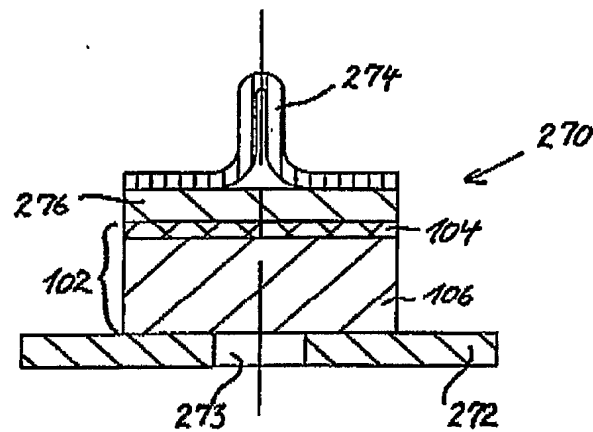


Fig. 17

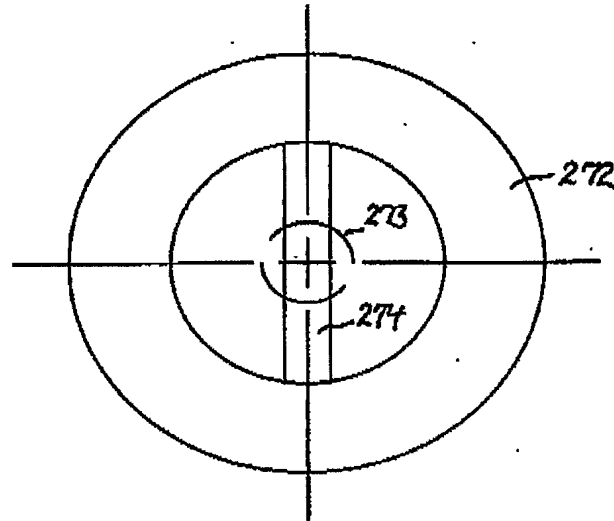


Fig. 18

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

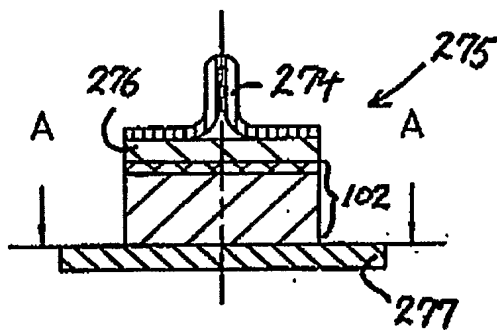


Fig. 19

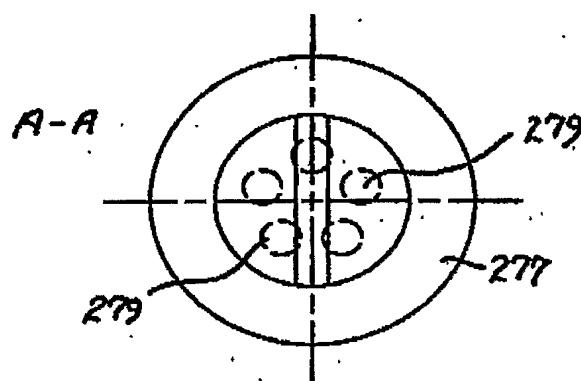


Fig. 20

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

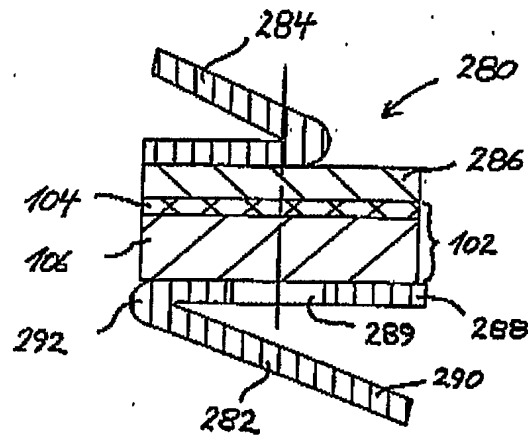


Fig. 21

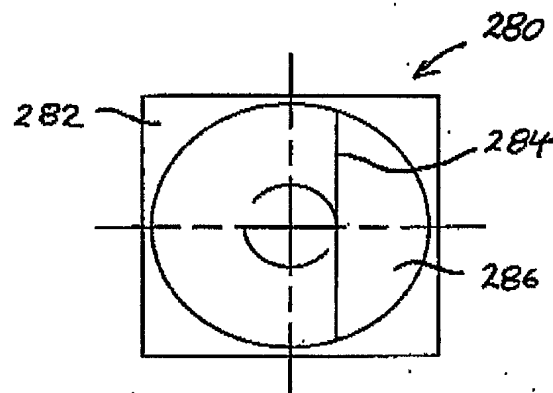


Fig. 22

Patent- og
Varemærkestyrelsen

28 NOV 2003

Modtaget

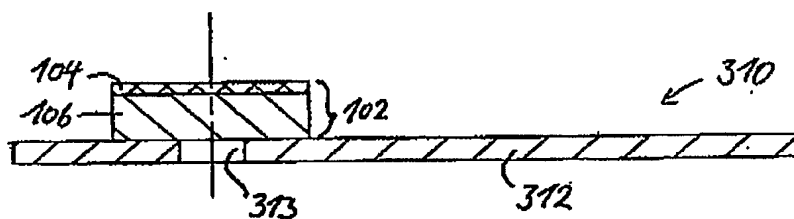


Fig. 23

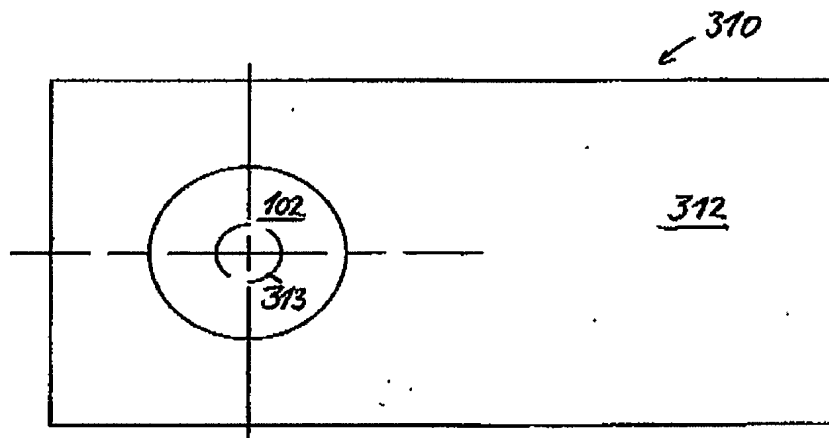


Fig. 24

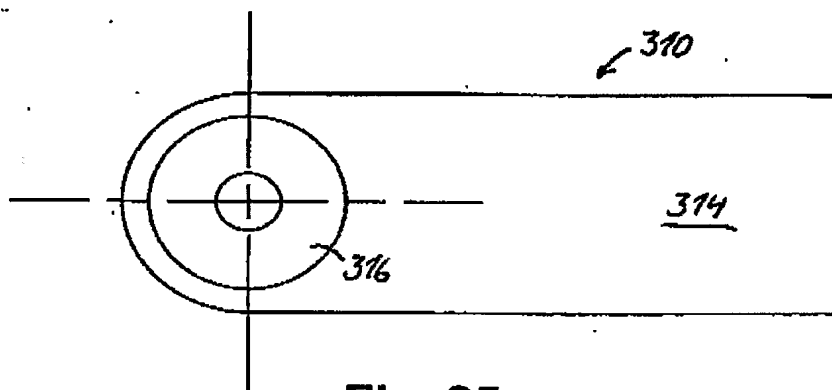


Fig. 25

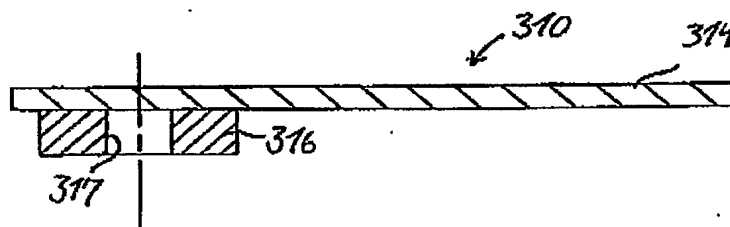


Fig. 26

Patent- og
Varemærkestyrelsen

28 NOV. 2003

Modtaget

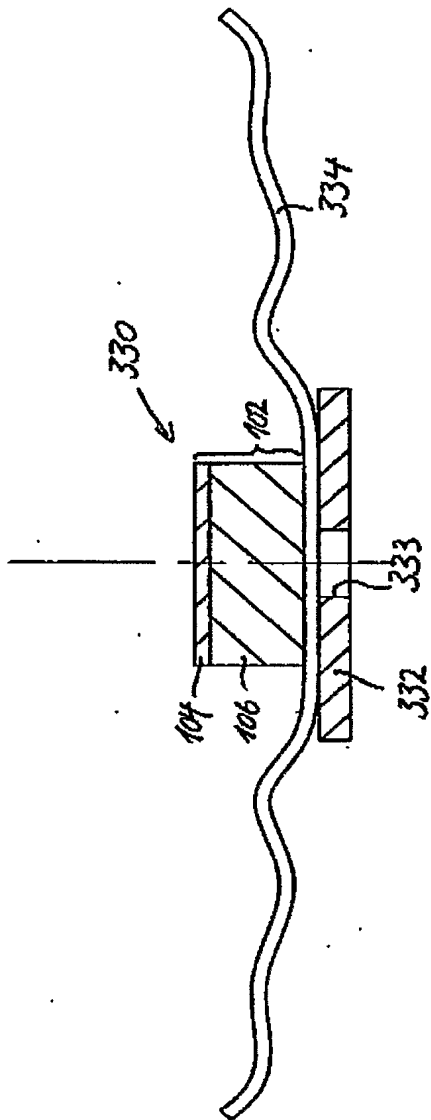


Fig. 27

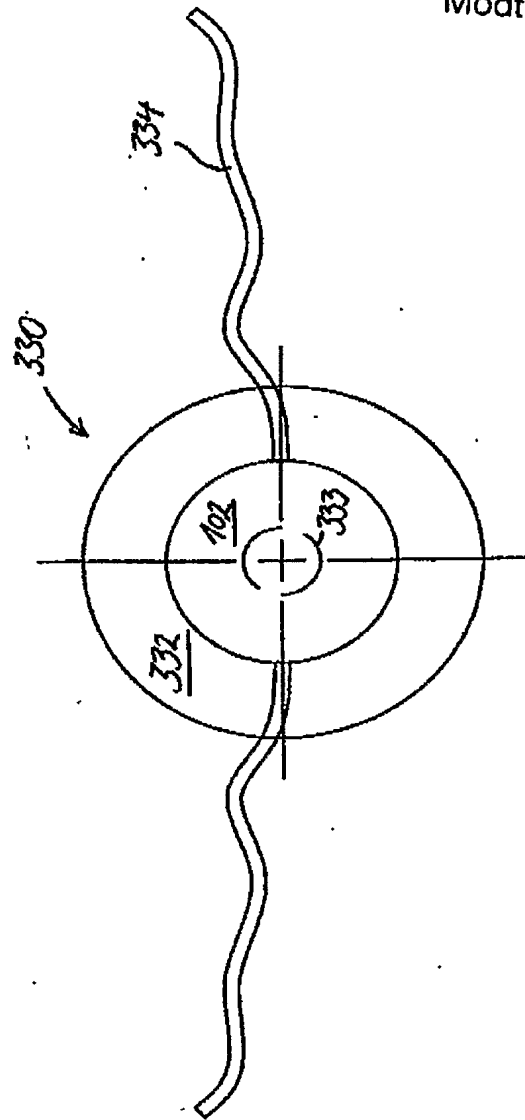


Fig. 28